# Modoc Bioregion

The Modoc Bioregion, an area of stark contrast, extends across California's northeast corner from Oregon to Nevada, and south to the southern border of Lassen County. From many vantage points, the view to the west is of forests and mountains, while the vista to the east is high desert characteristic of Nevada. Much of this sparsely populated bioregion of forests, mountains, high desert, picturesque valleys, piney woodlands, and volcanic uplands still looks as it did when wagon trains rumbled across the area 150 years ago.

## Location, People, Cities

Bounded by Oregon on the north and Nevada on the east, the Modoc bioregion extends westward across the Modoc Plateau, encompassing the Lassen and Modoc national forests. It includes all or part of seven counties: Modoc, and Lassen, and the eastern end of Shasta, Siskiyou and Tehama, northern edges of Butte and Plumas. Because bioregions have only fuzzy lines and can take in portions of several counties, it is difficult to estimate their populations precisely. But the Modoc Bioregion has the smallest population of all 10 bioregions, with fewer than 50,000 people. The largest cities are Alturas, the Modoc County seat; Susanville, the Lassen County seat; Burney in eastern Shasta County, and Maglia in northern Butte County.

The Northern Paiute and the Paiute-Shoshone are native to this bioregion. Indian reservations include Fort Bidwell, Alturas, Cedarville, Likely, and Lookout Rancherias; and Pit River, all in Modoc County.

### Tourist Attractions, Industries

Quaint little towns and settlements still reflect the bioregion's pioneer heritage when "downtown" may have consisted of little more than a general store, saloon, and church. Relics of the past — a trading post, an old fort — can still be found. Ranching remains the major agricultural industry, and timber is a significantly large employer.

## Climate, Geography

The climate features hot dry summers and cold moist winters with snow at higher elevations. Geography is varied in the Modoc Bioregion, with volcanic areas and wetlands to the west and high desert to the east. Lassen Volcanic National Park, which is studded with lakes and crowned by 10,457-foot Lassen Peak; Tule Lake, and Clear Lake National Wildlife Refuges, Ahjumawi Lava Springs State Park, and Lava Beds National Monument are on the western side. The eastern side, which resembles its neighbor, Nevada, has desert alkali lakes, Honey Lake Valley, and Modoc National Wildlife Refuge. The last volcanic activity at Mount Lassen was in 1915.

As if to demonstrate the variation of the bioregion's landscapes, the 25-mile Bizz Johnson Trail linking Susanville and Westwood follows a railroad grade from high desert through grasslands and oak woodlands into a dense forest of pine and cedar. The bioregion includes Modoc and Lassen National Forests and part of the Klamath National Forest. The largest lakes are Lake Almanor in Plumas County, Eagle Lake in Lassen County, Lower Klamath Lake in Siskiyou County, and Goose Lake in Modoc County. The Pit River flows southwest from the rugged Warner Mountains in eastern Modoc and Lassen counties across the Modoc Plateau and into the Sacramento River.

## Plants, Wildlife

Juniper and sagebrush cover much of the eastern side of the Modoc Bioregion, while yellow and Jeffrey pine, white fir, mixed conifer, cedar, and aspen are common in the more mountainous and forested areas to the west. Wildlife include bald eagles, antelope, greater sandhill cranes, ospreys, Canada geese, black-crowned night herons, mule deer, muskrats, pronghorn, cinnamon teal, northern pintails, Swainson's hawks, sage grouse, rainbow trout, marmots, hummingbirds, great horned owls, black bears, coyotes, porcupine, Modoc sucker, goshawk, bank swallow, Shasta crayfish, sage grouse, and Lost River sucker.

Rare plants include yellow arrowleaf, balsam root, long-haired star tulip, spiny milkwort, Ash Creek ivesia, Raven's lomatium, and woolly stenotus. For a complete list of the Modoc Bioregion's federal and state endangered, threatened and rare species, please refer to the chart at the end of this bioregional section.

### **CURRENT CONSERVATION INITIATIVES**

With over 70% of Modoc County managed by the state and federal governments, nearly every decision made in the county has potential to adversely affect private landowners, county government, and the local economy. Through the **Modoc County Land Use Committee**, however, Modoc County has paved the way for a new era in public lands management.

Appointed by the Modoc County Board of Supervisors, the 24 member Modoc County Land Use Committee is comprised of a cross section of individuals with expertise in timber, grazing, mining, hunting, fishing, wildlife, and farming - all activities which occur on public land. The purpose of the committee is to ensure that Modoc County is a full partner in managing public lands within the county. The Committee is charged with reviewing state and federal land management agency projects for possible impacts to individual citizens, county government, and the local economy. After carefully researching any proposed activities and meeting with agency representatives as needed, the committee then recommends appropriate action(s) to the Modoc County Board of Supervisors.

The committee has achieved some notable successes in a relatively short period of time. Four diverse projects stand out as a barometer of the committee's emergence as a full partner in public land management, including the Lava Beds National Monument, the Ash Creek Wildlife Area, the Grazing and Endangered Fish Project and the Modoc Elk Working Group.

The committee is currently involved in several ongoing projects including preserving farming on the Klamath Refuge through an integrated pest management program that is balanced and not overly restrictive; developing a coordinated planning process for the Sierra Nevada Conservation Framework; and establishing a

grass bank or insurance fund to stabilize local livestock operations while facilitating range improvements, especially prescribed fire.

For more information contact: Sean Curtis at (530) 233-6406.

Now in its third decade of cooperative management, the Eagle Lake Interagency Board of Directors has demonstrated that agencies can address natural resources issues across administrative boundaries. Formed in 1978, the Eagle Lake Interagency Board of Directors consists of five agencies that are responsible for resources management around Eagle Lake, the second largest natural lake in California.

The agencies have recognized the importance of working together to protect the fragile ecosystems of the lake and the basin. The board provides a forum for agencies to discuss activities and management proposals at the lake and to work cooperatively on projects. In addition, area residents and other local agencies value the board as a forum to express their views on management of the public and private lands in the surrounding Eagle Lake watershed.

Members of the board include managers from the U.S. Bureau of Land Management, Lassen National Forest, the California State Lands Commission, the California Department of Fish and Game, and a Lassen County supervisor. Issues and projects brought before the Board have varied widely since its inception. For example, the board supported Bureau of Land Management work to plug an old irrigation tunnel, worked closely on a project to regulate boat docks, assisted in a marina development project, supported a floating rest room proposal as a pollution reducing measure, and provided input to federal agencies on development of recreational facilities. The board has also provided input on issues such as cattle grazing, development of sewer systems for lake communities, and management of the lake's nationally-known fishery.

For further information contact: Eagle Lake Field Office Manager at (530) 257-0456.

The Clear Creek Coordinated Resource Management Plan was developed to guide the collective action of many groups to restore vital salmon habitat for the fall and late-fall run salmon.

The Lower Clear Creek is located west of Redding in Shasta County and begins at Whiskertown Dam. It is the first major tributary to the Sacramento River in the upper Sacramento Basin and is approximately 31,000 acres in size and 16 miles long.

Over the years, gold and gravel mining, logging, and dam construction in the area have negatively impacted stream conditions for the anadromous fish in the river. In spite of the decline, the creek is still one of only two tributaries that can support steelhead and three runs of salmon (including spring-run salmon and steelhead both of which are being considered for listing as threatened or endangered species). For this reason, the Shasta-Tehama Bioregional Council, a cooperative group of local, private, state, and federal interests identified lower Clear Creek as a watershed of "critical importance" due to the watershed's mix of private and public ownership and its tremendous potential to support salmon and steelhead populations.

In 1986, a Coordinated Resource Management and Planning Group (CRMP) was formed to allow all of the watershed's landowners and stakeholders to participate in the management of the area. The Western Shasta Resource Conservation District was chosen to coordinate the CRMP and several committees were established to address the overall health of the watershed and issues related to fisheries, education, fuels reduction, recreation, and soil erosion. The committees are spearheading a diverse range of projects across a wide range of issues.

At Horsetown Clear Creek Preserve, for example, a joint venture by the U.S. Bureau of Land Management and a group of private organizations and citizens associated with the Clear Creek CRMP, are working together to remove trash and build trails to make the area available for public use. Students now conduct studies on the preserve and hundreds of residents use the area for recreational purposes. Other project areas include: erosion

control, sediment removal, spawning gravel applied, mining equipment removed, fuel reduction, trash pickup, fuel breaks constructed, and education workshop. Restoration efforts are focused on releasing sufficient amounts of cold water from the bottom of Whiskeytown Dam and remedying the barrier condition at Saeltzer Dam. Habitat and water quality conditions are being improved by reclamation of previously mined areas and control actions in the upper watershed.

Recently, fall-run salmon populations have shown an increase due to increased flows and restoration activities. It is hoped that the efforts of the CRMP and team will make it possible for salmon numbers to increase and eventually return to their original numbers.

For more information contact: Lower Clear Creek CRMP, Western Shasta RCD at (530) 246-5299.

The Modoc-Washoe Experimental Stewardship Program (ESP) is one of three ESP range management programs in the nation. ESP is focusing on resolving range management conflicts through consensus and the involvement of all stakeholders. The program has shown how people with different interests can arrive at on-the-ground solutions to resource management problems. The mid-1970s were marked by controversy over livestock grazing on public lands. The U.S. Bureau of Land Management (BLM) was charged with failing to consider the environmental impacts of its livestock grazing program and, as a result, was forced to prepare over two hundred grazing environmental impact statements across the west. BLM failed to coordinate with livestock permittees about proposed reductions and, as a result, incurred intense mistrust by ranchers. Eventually, many ranchers filed lawsuits against BLM in an effort to delay or stop the BLM range management programs.

Responding to the controversy, Congress passed the 1978 Public Rangelands Improvement Act (PRIA). Section 12(a) directed the Secretaries of Interior and Agriculture to develop and implement an experimental program that would explore innovative grazing management policies and practices and provide

incentives to, or rewards for, permittees whose management improved range conditions. Approved in 1980, the Modoc-Washoe Experimental Stewardship Program (ESP) is one of three such programs in the nation. It comprises BLM's Surprise Resource Area and the Forest Service's Warner Mountain Ranger District, a total of about 2.25 million acres, roughly 600,000 of which is privately owned.

ESP is guided by a Steering Committee of 24 members representing diverse interests from the local geographic area. Decisions are by complete consensus. The committee's purpose is to foster improved management across all ownerships in order to provide long-term local economic stability. From its inception, the committee has relied on technical review teams (TRTs) composed of people with the technical skills and knowledge necessary to address particular issues or problems. TRTs investigate the issue or problem on the ground and make recommendations to the Steering Committee.

Since 1980, the Modoc-Washoe ESP has enjoyed notable success including the development of 25 Allotment Management Plans. It is also responsible for wilderness recommendations, actual-use billing, grazing fee credits for rancher-constructed range improvements, a structured herd management policy for wild horses, and reintroduction of California bighorn sheep and other native habitat.

The Modoc-Washoe ESP focuses on resolving conflicts through consensus. The program has shown that people with different interests can arrive at on-the-ground solutions to resource management problems. Future success hinges on timely decisions, innovative solutions, and tangible on-the-ground environmental and wildlife habitat improvement.

For more information contact: Susie Stokee, U.S. Bureau of Land Management at (530) 279-6101.